# MATERIAL SAFETY DATA SHEET

Date Prepared: December 29, 2003

## 1. PRODUCT/COMPANY IDENTIFICATION

**Product Name:**
**BONSAL® ProForm:**
**PF-202 CURB**
**PF-203 FAT CURB**
**PF-212 JAMB**
**PF-301 SQUARE NICHE**
**PF-302 PEAKED NICHE**
**PF-304 WIDE COMBO NICHE**
**PF-305 NARROW COMBO NICHE**
**PF-308 SOAP NICHE**
**Emergency Telephone:**
800-424-9300 (Chemtrec) or
703-527-3887 (Outside USA)

**Telephone Number for Information:**
704-525-1621

**Company's Name & Address:**
Bonsal American/an Oldcastle Company
8201 Arrowridge Blvd
Charlotte, NC 28273

## 2. EMERGENCY AND FIRST AID

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| **EMERGENCY INFORMATION:** | Odorless. No significant immediate hazards for emergency response are known. |
| **EYE:** | Flush eyes with plenty of water; mechanical effects only. |
| **SKIN:** | Wash off in flowing water or shower. |
| **INGESTION:** | No adverse effects anticipated by this route of exposure. |
| **INHALATION:** | Remove to fresh air if effects occur. Consult a physician. |
| **NOTE TO PHYSICIAN:** | No specific antidote. Supportive care. Treatment based on judgement of the physician in response to reactions of the patient |

## 3. COMPOSITION INFORMATION

**DESCRIPTION:** Gray and blue rigid cellular foam board.

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| Extruded Polystyrene Foam | | |
| Polystyrene | 30% | CAS# 9003-53-6 |
| 1-Chloro-1, 1-diflouroethane | < 2.7% | CAS# 75-68-3 |
| Chlorodifluoromethane | < 1.6% | CAS# 75-45-6 |
| Ethylchloride | < 0.88% | CAS# 75-00-3 |
| Carbon dioxide | < 3 % | CAS# 124-38-9 |
| Hexabromocyclododecane | < 2 % | CAS# 25637-99-4 |
| Continuous fiberglass | < 10 % | CAS# 65977-17-3 |
| **Cementitious Layer** | | |
| Portland cement | 80-90 % | CAS# 65997-15-1 |

## 4. HAZARDOUS INGREDIENTS

| COMPONENT | OSHA PEL (8-Hour TWA) | ACGIH TLV-TWA (1995-1996) | NIOSH REL (8-Hour TWA) |
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**1 Chloro-1-difluoroethane (HCFC 142b) (CAS# 75-68-3):** AIHA WEEL is 1000 ppm, TWA.

**Chlorodifluoromethane (CAS# 75-45-6):** ACGIH TLV and OSHA PEL are 1000 ppm. ACGIH classifies as A4.

**Ethyl Chloride (CAS# 75-00-3):** ACGIH TLV is 1000 ppm, Skin, A3. OSHA PEL is 1000 ppm.

**Carbon Dioxide (CAS# 124-38-9):** ACGIH TLV is 5000 ppm TWA and 30,000 ppm STEL. OSHA PEL is 10,000 ppm TWA and 30,000 STEL.

**Fibrous glass (CAS # 659777-17-3):** ACGIH TLV is 1 fiber / cc, A4. fiber/cc.

**Portland Cement (CAS# 65997-15-1):** ACGIH 10mg/m$^3$ (TWA) Total dust OSHA 10mg/m$^3$ (TWA) Total dust
5mg/m$^3$ (TWA) Respirable dust

## 5. HAZARD IDENTIFICATION

**POTENTIAL HEALTH EFFECTS:** (See Section 11 for toxicological data.)

**EYE CONTACT:** Eye contact is unlikely due to physical state. Dusts generated in processing may cause irritation or corneal injury due to mechanical action.

**SKIN CONTACT:** May cause skin irritation due to skin abrasion. Skin absorption is unlikely due to physical properties.

**INHALATION:** A single exposure to fibers or dust is not likely to cause adverse effects. Concentrations of the blowing agents anticipated incidental to proper handling are expected to be well below those which cause acute inhalation effects and below exposure guidelines.

**INGESTION:** Ingestion is unlikely due to physical state.

**CARCINOGENIC POTENTIAL:** Polystyrene foam dusts did not cause cancer in long-term animal studies. Based on available data, IARC concluded that there is inadequate evidence or carcinogencity in laboratory animals and An increase in uterine tumors has been reported in female mice exposed for their lifetime to 15,000 ppm ethyl chloride. Such tumors did not occur in rats similarly exposed. These results are not believed to be relevant to humans.

**TERATOLOGY (BIRTH DEFECTS):** No relevant information found.

**REPRODUCTIVE EFFECTS:** No relevant information found.

## 6. PHYSICAL/CHEMICAL DATA

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| **APPEARANCE/ODOR:** | Gray and blue rigid cellular foam board. |
| **BOILING POINT:** | Not applicable |
| **VAPOR PRESSURE:** | Not applicable |
| **pH** | |
| **SPECIFIC GRAVITY ($H_2O$ = 1.0):** | .027 to .064 |

## 7. FIRE AND EXPLOSION

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| **FLASH POINT:** | Not applicable |
| **AUTO IGNITION TEMPERATURE:** | Not applicable |
| **FLAMMABLE LIMITS** | Not applicable |
| **HAZARDOUS COMBUSTION PRODUCTS:** | In smoldering or flaming conditions, carbon monoxide, carbon dioxide, and carbon are generated. Evolution of small amounts of hydrogen halides occur when burned or heated over 250 C (482 F). Under high heat non-flaming conditions, small amounts of aromatic hydrocarbons such as styrene and ethylbenzene are generated. Under fire conditions polymers decompose. The smoke may contain polymer fragments of varying compositions in addition to unidentified toxic and/or irritating compounds.<br><br>Studies have shown that the products of combustion of this foam are not more acutely toxic than the products of combustion of common building materials, such as wood. |
| **OTHER FLAMMABILITY INFORMATION:** | Dense smoke is produced when product burns. Mechanical handling can cause formation of dusts. To reduce the potential for dust explosion, do not permit dust to accumulate. This product contains a flame retardant to inhibit accidental ignition from small fire sources.<br><br>This polystyrene foam product is combustible and should be protected from flame and other high heat sources. It should be installed with code acceptable thermal barriers or used in approved alternate constructions. |
| **EXTINGUISHING MEDIA:** | Water fog, carbon dioxide, dry chemical. |
| **FIRE FIGHTING INSTRUCTIONS:** | Keep people away. Isolate fire area and deny unnecessary entry. If material is molten, do not apply direct water stream. Use fine water spray or foam. Cool surroundings with water to localize fire zone. |
| **PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS:** | Wear positive-pressure, self-contained breathing apparatus (SCBA) and protective fire fighting clothing (include fire fighting helmet, coat, pants, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance. |

## 8. STABILITY AND REACTIVITY DATA

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| **STABILITY:** | Stable at typical use temperatures. |
| **CONDITIONS TO AVOID:** | Avoid temperatures above 300C (572F). |
| **INCOMPATIBILITY:** | Avoid contact with oxidizing materials. Aromatic hydrocarbons, Aliphatic hydrocarbons, esters, amines, aldehydes. |
| **HAZARDOUS DECOMPOSITION:** | Hazardous decomposition products depend on temperature, air supply and the presence of other materials. Hazardous decomposition products may include and are not limited to: aromatic compounds, aldehydes, 4-vinylclohexene, ethyl Benzene, styrene hydrogen bromide, hydrogen fluoride, and hydrogen chloride. |
| **HAZARDOUS POLYMERIZATION:** | Will not occur. |

## 9. PRECAUTIONS FOR HANDLING, STORAGE AND DISPOSAL

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| **HANDLING:** | Mechanical handling equipment can cause formation of dusts. Maintain good housekeeping. Layers of flammable dusts should not be permitted to accumulate. |
| **STORAGE:** | Flammable vapors may accumulate in some storage situations. No smoking or open flame in handling and storage area. Minimize sources of ignition, such as static buildup, heat, spark, or flame. When large quantities of this product are stored or fabricated, blowing agent released from the foam may tend to accelerate corrosion of heaters and boilers. |
| **DISPOSAL:** | DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.<br>FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: recycler, reclaimer, incinerator, landfill. |

## 10. EXPOSURE CONTROLS/PERSONAL PROTECTION

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| **ENGINEERING CONTROLS:** | Adequate general ventilation is required. |
| **RESPIRATORY PROTECTION:** | No respiratory protection should be needed. Protection may be needed when fabricating this product. |
| **EYE PROTECTION:** | Use safety glasses. If there is a potential for exposure to particles which could cause mechanical injury to the eye, wear chemical goggles. |
| **SKIN PROTECTION:** | Under dry conditions, cloth gloves should provide adequate protection. |

## 11. TRANSPORTATION DATA

DEPARTMENT OF TRANSPORTATION (D. O. T.):
This product is not regulated by D.O. T. when shipped domestically by land.

## 12. OTHER REGULATORY INFORMATION

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| **Status under US OSHA Hazard Communication Rule 29 CFR 1910.1200:** | This product has been determined to be an article under the definition included in the OSHA Hazard Communication Standard (29 CFR 1910.1200). |
| **Status under CERCLA/Superfund, 40 CFR 117 and 302:** | This product contains the following substances subject to the reporting requirements of Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:<br>Chlorodifluoromethane –CAS#000075-45-6 <1.6 %<br>Chlorodifluoroethane – CAS#000075-68-3 <2.7% |
| **Hazard Category under SARA (Title III), Sections 311 and 312:** | This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:<br>Exempt article |
| **Status under SARA (Title III), Section 313:** | This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:<br>Chlorodifluoromethane –CAS#000075-45-6 <1.6 %<br>Chlorodifluoroethane – CAS#000075-68-3 <2.7% |
| **Status under California Proposition 65:** | The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986:<br>WARNING: This product contains a chemical known to the State of California to cause cancer. |

## 13. OTHER INFORMATION

THE W.R. BONSAL COMPANY HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION 3 (Composition Information)

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. It is the user's obligation to determine the conditions of safe use of this product.